DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011716 Address: 333 Burma Road **Date Inspected:** 27-Jan-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Xu Xian Ping **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG Sub-Assembly**

Summary of Items Observed:

On this day Caltrans OSM Quality Assurance (QA) Inspector Stefan Holmes was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China.

This QA Inspector observed the following work in progress:

Flux Cored Arc Welding (FCAW) pursuant to Weld Repair Report #B-WR10449 (for ZPMC UT Reject) of 10TR1-010; Weld 014. Welder is identified as 201215. ZPMC Quality Control (QC) is identified as Yang Qing Feng. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and WRR used.

Flux Cored Arc Welding (FCAW) pursuant to Weld Repair Report #B-WR10455 (for ZPMC UT Reject) of 10TR2-014; Weld 014. Welder is identified as 045246. ZPMC Quality Control (QC) is identified as Yang Qing Feng. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and WRR used.

Flux Cored Arc Welding (FCAW) of 20TR2-004; Weld 015. Welder is identified as 051356. ZPMC Quality Control (QC) is identified as Guo Yuan Ting. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-TC-U5-F. Welding appears to conform to the requirements of the WPS used.

Flux Cored Arc Welding (FCAW) of 20TR2-001; Weld 015. Welder is identified as 051356. ZPMC Quality

WELDING INSPECTION REPORT

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Control (QC) is identified as Guo Yuan Ting. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-TC-U5-F. Welding appears to conform to the requirements of the WPS used.

Flux Cored Arc Welding (FCAW) of 20TR2-007; Weld 015. Welder is identified as 044830. ZPMC Quality Control (QC) is identified as Guo Yuan Ting. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-TC-U5-F. Welding appears to conform to the requirements of the WPS used.

Flux Cored Arc Welding (FCAW) of 20TR2-015; Weld 011. Welder is identified as 044790. ZPMC Quality Control (QC) is identified as Guo Yuan Ting. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-TC-U5-F. Welding appears to conform to the requirements of the WPS used.

This QA Inspector observed Magnetic Particle Testing being performed by ZPMC MT Technician Jin Jian Ting of LD3021-001. 16 welds tested with 14 rejects report by the ZPMC MT Technician as follows:

- 1. Weld 36; MT Reject; Y=50mm; Requires CWR
- 2. Weld 36; MT Reject; Y=1250mm; Requires CWR
- 3. Weld 37; MT Reject; Y=30mm; Requires CWR
- 4. Weld 43; MT Reject; Y=50mm; Requires CWR
- 5. Weld 43; MT Reject; Y=1270mm; Requires CWR
- 6. Weld 44; MT Reject; Y=1230mm; Requires CWR
- 7. Weld 56; MT Reject; Y=30mm; Requires CWR
- 8. Weld 57; MT Reject; Y=480mm; Requires CWR
- 9. Weld 64; MT Reject; Y=1270mm; Requires CWR
- 10. Weld 71; MT Reject; Y=1280mm; Requires CWR
- 11. Weld 77; MT Reject; Y=0mm; Requires CWR
- 12. Weld 78; MT Reject; Y=600mm; Requires CWR
- 13. Weld 85; MT Reject; Y=20mm; Requires CWR
- 14. Weld 85; MT Reject; Y=1280mm; Requires CWR

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Holmes,Stefan	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer